STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/541.626
Source:	1FWO
Date Processed by STIC:	4/27/06
	() ' ' '

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR	DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/54/, 626
ATTN:	NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
₂ <u>U</u>	_Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	_Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4	_Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	_Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	_Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	_Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10	_Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11	_Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown. Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	_ Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWO

RAW SEQUENCE LISTING DATE: 04/27/2006 PATENT APPLICATION: US/10/541,626 TIME: 09:14:14 Input Set : A:\PTO.KD.txt Output Set: N:\CRF4\04272006\J541626.raw 3 <110> APPLICANT: Haruo HANAWA 5 <120> TITLE OF INVENTION: VECTOR FOR GENE THERAPY AND METHOD OF QUANTIFYING TARGET PROTEIN IN MAMMAL OR CULTURED CELLS WITH THE ADMINISTRATION OF THE VECTOR FOR GENE 7 THERAPY 9 <130> FILE REFERENCE: 0760-0347PUS1 11 <140> CURRENT APPLICATION NUMBER: US 10/541,626 12 <141> CURRENT FILING DATE: 2005-07-07 14 <150> PRIOR APPLICATION NUMBER: PCT/JP2003/016956 15 <151> PRIOR FILING DATE: 2003-12-26 Does Not Comply 17 <150> PRIOR APPLICATION NUMBER: JP 2003-3967 Corrected Diskette Needed 18 <151> PRIOR FILING DATE: 2003-01-10 20 <160> NUMBER OF SEQ ID NOS: 24 22 <210> SEO ID NO: 1 23 <211> LENGTH: 11 24 <212> TYPE: PRT 25 <213> ORGANISM: Artificial Sequence 27 <220> FEATURE: C19-29 region of glucagon of + 28 <223> OTHER INFORMATION: oligopeptide /encoding human, mouse or rat 30 <400> SEQUENCE: 1 32 Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr 36 <210> SEQ ID NO: 2 37 <211> LENGTH: 1471 38 <212> TYPE: DNA 39 <213> ORGANISM: Artificial Sequence 41 <220> FEATURE: 42 <223> OTHER INFORMATION: DNA insert encoding rat IFN-r receptor, rat IgG Fc region and glucagon 43 C19-29 region 46 <220> FEATURE: 47 <221> NAME/KEY: CDS 48 <222> LOCATION: (13)..(1461) 49 <223> OTHER INFORMATION: DNA insert encoding rat IFN-r receptor, rat IgG Fc region and glucagon 50 C19-29 region 52 <400> SEQUENCE: 2 53 gaattcattt aa atg att etg etg gte etg atg etg tet geg gag ate 51 54 Met Ile Leu Leu Val Val Leu Met Leu Ser Ala Glu Ile 55 57 ggg agt gga gct ttg atg agc acc gag gat cct aag ccg ccc tcg gtg 99

58 Gly Ser Gly Ala Leu Met Ser Thr Glu Asp Pro Lys Pro Pro Ser Val

59 15 20 25 61 cct gcg cca aca aat gtt cta att acg tcc tat gac ttg aac cct gtc 147 62 Pro Ala Pro Thr Asn Val Leu Ile Thr Ser Tyr Asp Leu Asn Pro Val 63 30 35 40 45

RAW SEQUENCE LISTING DATE: 04/27/2006 PATENT APPLICATION: US/10/541,626 TIME: 09:14:14

Input Set : A:\PTO.KD.txt

65	gta	cat	tgg	aag	cac	cag	aac	gtg	tcg	cag	gct	gcc	gtc	ttc	act	gta	1	.95
	Val	His	Trp	Lys	His	Gln	Asn	Val	Ser	Gln	Ala	Ala	Val	Phe	Thr	Val		
67					50					55					60			
														acc			2	43
	GIn	vai	Lys		Tyr	Pro	Glu	Tyr		Thr	Asp	Ala	Cys	Thr	Asn	Ile		
71	~~~			65				.	70					75			-	.01
														cct Pro			2	91
75	Ата	пть	80	ıyı	Cys	ASII	116	85	пуъ	птъ	116	ser	90	PIO	Asp	ser		
	tet	acc		acc	aga	att	aag		aaq	att	gga	caa		gaa	tet	acc	3	39
		_			_	_	_	_	_	_			_	Glu		_	_	
79		95			5		100		-1-		1	105	5					
81	tat	gcg	cag	tca	gaa	gag	ttt	att	atg	tgc	cga	aag	ggg	aag	gtt	gga	3	87
														Lys				
	110					115					120					125		
														att			4	35
	Pro	Pro	Gly	Leu		Ile	Gly	Arg	Lys		Asp	Gln	Leu	Ile		His		
87					130					135					140		_	
								_	_	_	_		-	ttt		-	4	83
91	TIE	Pne	пір	145	пуѕ	vaı	ASII	vai	150	GIII	GIU	THE	Met	Phe 155	GIY	Asp		
	gga	aat	acc		tac	aca	ttc	gac		act	ata	+++	ata	aaa	cat	tac	5	31
								_			-			Lys				J.
95	1		160	-1-	-1-			165	-1-				170			- 1 -		
97	agg	agt	ggg	gag	atc	cta	cat		qaa	cat	agc	qtc		aaa	qaa	gat	5	79
		_		_					-		_	_		Lys	_	_		
99		175					180					185						
	-	_	_			_		_					-	_		g aat		627
			Gli	ı Thr	Let	_		ı Lev	ı Asr	ı Ile			l Sei	r Thr	: Lei	ı Asn		
	190					195					200					205		
																gtt		675
100		ASI	ı ıyı	Cys	210		val	L Vai	. GIŞ	/ Lys 215		Sei	r Pne	err	220	ı Val	•	
		aca	a daa	aca			o dad		tat			. +++	- ata	r cat		gac		723
																Asp		123
111			. 010	225				, ,,,,	230		, , , ,	, , , , ,		235	_	7.1.5		
113	aga	gaa	qaa	qcq	qco	qcc	gto	1 000			tqt	. qqa	a gat			aag		771
																Lys		
115			240					245	_		_	_	250	_	_	_		
																ccc		819
		Cys	: Ile	Cys	Thr	Gly			. Val	. Ser	Ser			e Ile	Phe	e Pro		
119		255					260					265						
																acg		867
			Pro	Lys	Asp			ı Thr	. ITe	Thi			r Pro) Lys	: Val	Thr		
	270					275					280					285		015
																agc Ser		915
127	_	val	. val	. val	290		: ser	. GII	ASE	295 295		GIL	ı val	r uis	300			
		+++	- a+=					· ~+~					, aa+	- ~~		cca		963
123	-99		. yua	. yat	yac	919	yac	, ycc	Cat	. acc	. yet	. cas	, act	. cya	. CCc	LUCA		203

RAW SEQUENCE LISTING DATE: 04/27/2006 TIME: 09:14:14 PATENT APPLICATION: US/10/541,626

Input Set : A:\PTO.KD.txt
Output Set: N:\CRF4\04272006\J541626.raw

		_	_							_					_		
	Trp	Phe	Val	-	Asp	Val	Glu	Val		Thr	Ala	Gln	Thr	_	Pro	Pro	
131				305					310					315			
	gag		_			_			_		_	_	_				1011
	Glu	GIU		Phe	Asn	Ser	Thr		Arg	ser	vaı	ser		Leu	Pro	11e	
135			320					325					330				1050
	ctg		_	_						_		_	-	_	-		1059
	Leu		Gin	Asp	Trp	ьеи		GIY	Arg	Thr	Pne		Cys	ьys	vai	Thr	
139		335					340					345	L				1107
	agt	-	-														1107
	Ser 350	Ala	Ата	Pne	Pro		PIO	ше	GIU	ьys		тте	ser	ьуѕ	PIO	365	
		200	202	-	~++	355	ast	~+ ~	+	200	360	+ = =	aat	3.00	224		1155
	ggc Gly	-			_	_		_			_				_	_	1133
140	_	Arg	1111	GIII	370	PIO	птъ	val	туг	375	Mec	Ser	PIO	1111	380	GIU	
	gag	24.4	200	a2a		~~~	ata	24+	ata		+~~	ata	at a	222		tta	1203
	Glu																1203
150		Mec	1111	385	ASII	Gru	vai	per	390	TIII	Cys	Mec	vaı	395	Gry	FIIC	
	tat	ccc	cca		att	tat	ata	aaa		cac	ato	220	aaa		cca	cad	1251
	Tyr																1231
155	-	110	400	лър	116	TYT	Val	405	пр	0111	FICE	AGII	410	0111	110	J 111	
	gaa	aac		aad	aac	act	cca		acq	atα	gac	aca		aaa	agt.	tac	1299
	Glu																
159		415	-1-	_,,			420				1100	425		0-1		-1-	
	ttc		tac	agc	aaσ	ctc		ata	aaq	aaq	gaa		taa	cag	cag	gga	1347
	Phe																_
	430		-1-			435					440	4	-			445	
	aac	acq	ttc	acq	tat	tct	ata	cta	cat	qaa	qqc	ctq	cac	aac	cac	cat	1395
	Asn																
167					450					455	-				460		
169	act	gag	aag	agt	ctc	tcc	cac	tct	ccg	ggt	aaa	gcc	caa	gat	ttt	gtg	1443
170	Thr	Glu	Lys	Ser	Leu	Ser	His	Ser	Pro	Gly	Lys	Ala	Gln	Asp	Phe	Val	
171				465					470					475			
173	cag	tgg	ttg	atg	aat	acc	tgag	gaatt	ct								1471
174	Gln	Trp	Leu	Met	Asn	Thr											
175			480														
	<210																
179	<211	l> LI	ENGT	I: 47	790												
	<212																
	<213				Art:	lfic:	ial S	Seque	ence								
	<220										_						
	<223	3 > 07	THER	INFO	ORMA:	CION:	: DNA	A sec	quen	ce of	art	cific	cial	exp	ress:	ion vect	or
pCAGGS					_												
	<400		-												انتيات		
		-	-		_	_	-		_							tcata	60 120
																gaccgc	120
																caatag	180 240
																cagtac	300
			-		_	_	-	_		_	_		_		-	ggcccg	360 360
																ctacg	360 420
199	tatt	agto	cat o	gcta	attac	cc at	-gggt	Legas	g gtg	gagco	cca	cgti	ccg	JEE (cacto	ctcccc	420

RAW SEQUENCE LISTING DATE: 04/27/2006 PATENT APPLICATION: US/10/541,626 TIME: 09:14:14

Input Set : A:\PTO.KD.txt

			cccaattttg				480
			agaagcacac				540
			gtgcggcggc				600
			ggcggcggcg				660
			cgccccgtgc				720
			tactcccaca				780
			tttaatgacg				840
			gccctttgtg				900
			gccgcgtgcg				960
			gtgcgctccg				1020
221	ggtgccccgc	ggtgcggggg	ggctgcgagg	ggaacaaagg	ctgcgtgcgg	ggtgtgtgcg	1080
			gtgggcgcgg				1140
225	cctccccgag	ttgctgagca	cggcccggct	tcgggtgcgg	ggctccgtgc	ggggcgtggc	1200
227	gcggggctcg	ccgtgccggg	cggggggtgg	cggcaggtgg	gggtgccggg	cggggcgggg	1260
229	ccgcctcggg	ccggggaggg	ctcgggggag	gggcgcggcg	gccccggagc	gccggcggct	1320
231	gtcgaggcgc	ggcgagccgc	agccattgcc	ttttatggta	atcgtgcgag	agggcgcagg	1380
233	gacttccttt	gtcccaaatc	tggcggagcc	gaaatctggg	aggcgccgcc	gcaccccctc	1440
235	tagcgggcgc	gggcgaagcg	gtgcggcgcc	ggcaggaagg	aaatgggcgg	ggagggcctt	1500
237	cgtgcgtcgc	cgcgccgccg	tccccttctc	catctccagc	ctcggggctg	ccgcaggggg	1560
239	acggctgcct	tcggggggga	cggggcaggg	cggggttcgg	cttctggcgt	gtgaccggcg	1620
			catgttcatg				1680
			tctcatcatt				1740
			cagaaggtgg				1800
			ccctctgcca				1860
			taaaggaaat				1920
			aggacatatg				1980
			gcaacatatg				2040
			tatgaaacag				2100
			gattttttt				2160
			acatgtttta				2220
			tcttctctta				2280
			tgtttcctgt				2340
			taaagtgtaa				2400
			cactgcccgc				2460
			agcaaccata				2520
			ccattctccg				2580
			ggcctctgag				2640
			aaagctaact				2700
			ttcacaaata				2760
			gtatcttatc				2820
			gtttgcgtat				2880
			ggctgcggcg				2940
			gggataacgc				3000
			aggccgcgtt				3060
			gacgctcaag				3120
			ctggaagctc				3180
			cctttctccc				3240
			cggtgtaggt				3300
			gctgcgcctt				3360
	according	cagecegace	googoott	acceggeaac	caccyccicg	ageceaacee	3300

RAW SEQUENCE LISTING DATE: 04/27/2006
PATENT APPLICATION: US/10/541,626 TIME: 09:14:14

Input Set : A:\PTO.KD.txt

```
299 ggtaagacac gacttatege caetggeage agecaetggt aacaggatta geagagegag
                                                                              3420
     301 gtatgtaggc ggtgctacag agttcttgaa gtggtggcct aactacggct acactagaag
                                                                              3480
     303 gacagtattt ggtatctgcg ctctgctgaa gccagttacc ttcggaaaaa gagttggtag
                                                                              3540
     305 ctcttgatcc ggcaaacaaa ccaccgctgg tagcggtggt ttttttgttt gcaagcagca
                                                                              3600
     307 gattacgcgc agaaaaaaag gatctcaaga agatcctttg atcttttcta cggggtctga
                                                                              3660
     309 cgctcagtgg aacgaaaact cacgttaagg gattttggtc atgagattat caaaaaggat
                                                                              3720
     311 cttcacctag atccttttaa attaaaaatg aagttttaaa tcaatctaaa gtatatatga
                                                                              3780
     313 gtaaacttgg tctgacagtt accaatgctt aatcagtgag gcacctatct cagcgatctg
                                                                              3840
     315 totatttogt toatocatag ttgcctgact coccgtcgtg tagataacta cgatacggga
                                                                              3900
    317 gggcttacca tctggcccca gtgctgcaat gataccgcga gacccacgct caccggctcc
                                                                              3960
    319 agatttatca gcaataaacc agccagccgg aagggccgag cgcagaagtg gtcctgcaac
    321 tttatccgcc tccatccagt ctattaattg ttgccgggaa gctagagtaa gtagttcgcc
                                                                              4080
    323 agttaatagt ttgcgcaacg ttgttgccat tgctacaggc atcgtggtgt cacgctcgtc
                                                                              4140
    325 gtttggtatg gcttcattca gctccggttc ccaacgatca aggcgagtta catgatcccc
                                                                              4200
    327 catgttgtgc aaaaaagcgg ttagctcctt cggtcctccg atcgttgtca gaagtaagtt
                                                                              4260
     329 ggccgcagtg ttatcactca tggttatggc agcactgcat aattctctta ctgtcatgcc
                                                                              4320
    331 atccgtaaga tgcttttctg tgactggtga gtactcaacc aagtcattct gagaatagtg
                                                                              4380
    333 tatgcggcga ccgagttgct cttgcccggc gtcaatacgg gataataccg cgccacatag
                                                                              4440
    335 cagaacttta aaagtgctca tcattggaaa acgttcttcg gggcgaaaac.tctcaaggat
                                                                              4500
    337 cttaccgctg ttgagatcca gttcgatgta acccactcgt gcacccaact gatcttcagc
                                                                              4560
    339 atcttttact ttcaccagcg tttctgggtg agcaaaaaca ggaaggcaaa atgccgcaaa
                                                                              4620
    341 aaagggaata agggcgacac ggaaatgttg aatactcata ctcttccttt ttcaatatta
                                                                              4680
    343 ttgaagcatt tatcagggtt attgtctcat gagcggatac atatttgaat gtatttagaa
                                                                              4740
    345 aaataaacaa ataggggttc cgcgcacatt tccccgaaaa gtgccacctg
                                                                              4790
    348 <210> SEQ ID NO: 4
    349 <211> LENGTH: 1233
    350 <212> TYPE: DNA
    351 <213> ORGANISM: Artificial Sequence
    353 <220> FEATURE:
    354 <223> OTHER INFORMATION: DNA insert encoding rat CTLA4, rat IgG Fc region
and glucagon C19-29
    355
              region
    357 <220> FEATURE:
    358 <221> NAME/KEY: CDS
    359 <222> LOCATION: (13)..(1224)
    360 <223> OTHER INFORMATION: DNA insert encoding rat CTLA4, rat IgG Fc region
and glucagon C19-29
    361
              region
    363 <400> SEQUENCE: 4
    364 gaattcattt aa atg gct tgt ctt gga ctc cag agg tac aaa act cac ctg
                                                                                51
    365
                      Met Ala Cys Leu Gly Leu Gln Arg Tyr Lys Thr His Leu
    366
    368 cag ctg cct tct agg act tgg cct ttt gga gtc ctg ctt tct ctc
                                                                                99
    369 Gln Leu Pro Ser Arg Thr Trp Pro Phe Gly Val Leu Leu Ser Leu Leu
    370
             15
                                 20
    372 ttc atc cca atc ttc tct gaa gcc ata caa gtg acc caa cct tca gtg
                                                                               147
    373 Phe Ile Pro Ile Phe Ser Glu Ala Ile Gln Val Thr Gln Pro Ser Val
                             35
                                                 40
    376 gtg ttg gcc agc agc cac ggt gtc gcc agc ttt cca tgt gaa tat gca
                                                                               195
    377 Val Leu Ala Ser Ser His Gly Val Ala Ser Phe Pro Cys Glu Tyr Ala
    378
                         50
                                             55
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/27/2006 PATENT APPLICATION: US/10/541,626 TIME: 09:14:15

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\04272006\J541626.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:9; Line(s) 846
Seq#:10; Line(s) 858
Seq#:11; Line(s) 870
Seq#:12; Line(s) 882
Seq#:23; Line(s) 1023
Seq#:24; Line(s) 1035

VERIFICATION SUMMARY

DATE: 04/27/2006

PATENT APPLICATION: US/10/541,626 TIME: 09:14:15

Input Set : A:\PTO.KD.txt